

Title (en)

Iron compound particles and magnetic recording medium using same

Title (de)

Eisenverbindung enthaltende Teilchen und magnetisches Aufzeichnungsmittel mit diesen

Title (fr)

Particules contenant un composé de fer et moyen d'enregistrement magnétique utilisant les mêmes

Publication

**EP 1739059 A3 20090902 (EN)**

Application

**EP 06013168 A 20060626**

Priority

JP 2005185919 A 20050627

Abstract (en)

[origin: EP1739059A2] Non-magnetic powder of particles for non-magnetic lower layer applications is provided that enables a multilayer coating type magnetic recording medium having good surface smoothness to be obtained. The particles are iron compound particles having a long axis with a standard geometrical deviation, as obtained from a transmission electron microscope image, that is greater than 1.5, and a short axis with a standard geometrical deviation, as obtained from a TEM image, that is greater than 1.35. The invention can be ideally applied with respect to particles that, when L is the average length of the long axis and D is the average length of the short axis, obtained from TEM images, satisfy at least one of the following equations (1) and (2). (1): (Cumulative number of particles having a long-axis length of not more than L/2) / (cumulative number of particles having a long-axis length of not more than 2L) #§ 0.5; (2): (Cumulative number of particles having a short-axis length of not more than D/2) / (cumulative number of particles having a short-axis length of not more than 2D) #§ 0.5. The iron compound particles may be hematite or iron oxyhydroxide.

IPC 8 full level

**C01G 49/02** (2006.01); **C01G 49/06** (2006.01)

CPC (source: EP US)

**B82Y 30/00** (2013.01 - EP US); **C01G 49/02** (2013.01 - EP US); **C01G 49/06** (2013.01 - EP US); **G11B 5/7368** (2019.05 - EP US);  
**C01P 2004/62** (2013.01 - EP US); **C01P 2004/64** (2013.01 - EP US); **C01P 2006/11** (2013.01 - EP US); **C01P 2006/12** (2013.01 - EP US);  
**Y10T 428/2982** (2015.01 - EP US)

Citation (search report)

- [X] EP 0997500 A1 20000503 - TODA KOGYO CORP [JP]
- [X] EP 1073042 A1 20010131 - TODA KOGYO CORP [JP]
- [X] EP 0823399 A1 19980211 - TODA KOGYO CORP [JP]
- [A] US 2002028353 A1 20020307 - HAYASHI KAZUYUKI [JP], et al
- [A] US 2001009728 A1 20010726 - HAYASHI KAZUYUKI [JP], et al

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

**EP 1739059 A2 20070103; EP 1739059 A3 20090902; EP 1739059 B1 20161026**; CN 100552778 C 20091021; CN 1892829 A 20070110;  
US 2007009737 A1 20070111; US 7641990 B2 20100105

DOCDB simple family (application)

**EP 06013168 A 20060626**; CN 200610094152 A 20060627; US 47306506 A 20060623